REMARKS

Claims 15 and 20-28 are pending in this application. Claims 15 and 27 are amended herein. Claim 19 is cancelled herein without prejudice or disclaimer. Support for the amendments to the claims may be found in the claims as originally filed and, in particular, claim 19. Reconsideration is requested based on the foregoing amendment and the following remarks.

Response to Arguments:

The Applicants appreciate the consideration given to their arguments, and the new grounds of rejection. Further favorable consideration is requested.

Objections to the Claims:

Claim 15 was objected to for an informality. Claim 15 was amended in substantial accord with the Examiner's suggestion. The Examiner's suggestion is appreciated. Withdrawal of the objection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 103:

Claims 15, 20, and 22-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0203923 to Mullen (hereinafter "Mullen") in view of U.S. Patent No. 6,442,391 to Johansson et al. (hereinafter "Johansson") and U.S. Patent Application Publication No. 2005/0099942 to Kurihara (hereinafter "Kurihara"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

According to amended claim 15, a method for determining the position of a first mobile radio communication device using the position information of neighboring second mobile radio communication devices is claimed. A step of emitting an inquiry signal includes requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio communication terminal device. The second clause of claim 15, in particular, recites:

> Before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile

> radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio communication terminal device, wherein the preceding inquiry signal is a broadcast radio signal.

Neither Mullen, Johansson, nor Kurihara teaches, discloses, nor suggests "before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio communication terminal device, wherein the preceding inquiry signal is a broadcast radio signal," as recited in claim 15.

Under item 6 of the Office Action on pages 3 and 4, claim 15, according to the Office Action, is brought into context with Mullen, wherein "A requesting user of a cellular phone transmits a location request from said requesting cell phone to a second user, where said locationing includes finding the location of said requesting cell phone (paragraph 43, lines 8-11 and paragraph 55, lines 7-13)".

In this regard it has to be mentioned that paragraph 43, lines 8-11 describes "Thus, to increase security even more a requesting user`s cell phone may directly request a user`s location from the requested user`s cell phone without the need for a database." Paragraph 55, lines 7-13, moreover, describes "Directional arrow 633 may also be included in display 600 to indicate where the requested user's location is relative to the location and direction of cell phone 300 (e.g. the requesting user). Persons skilled in the art will appreciate that for some directional information 630 the location of the requesting user must be obtained. This information may be obtained either from cell 300, a remote facility, or by any other suitable means."

In the light of paragraph 43 of Mullen, it is clear that Mullen merely describes a first mobile station which tries to get the positioning information of a second mobile station. But Mullen fails to describe the feature of claim 15 of a method for determining the position of a first mobile radio communication device the first mobile radio communication device using the position information of neighboring second mobile radio communication devices for determining its own position.

Paragraph 55, moreover, fails to disclose the above-mentioned feature of claim 15, since there is no hint that the position of the cell phone 300 is determined by using the requested user`s location.

Mullen merely uses the position information of the requested cell phone for determining the position of the requested cell phone, but not for determining the position of the requesting cell phone, which would be comparable with the first mobile radio communication terminal device, which performs the inquiry signal and the retrieval signal according to claim 15.

At least due to these differences, a person skilled in the art would not find the feature of the first mobile radio communication terminal device … requesting that each second mobile radio communication terminal device participate in determination of the local position of the first mobile radio terminal device, since according to Mullen, merely the local position of the second mobile radio communication terminal device is determined by its position information, but not the position of the first mobile radio communication terminal device.

On page 4, it is alleged that the feature of "inferring a distance between the first mobile radio communication terminal device and the at least one second mobile radio communication terminal device." would be anticipated by paragraph 55, lines 7-22 "said locationing includes finding position of said requesting cell phone relative to said second cell phone".

It has to be mentioned that finding a position of the requesting cell phone relative to said second cell phone does not explicitly include the feature of inferring the distance between the first mobile radio communication terminal device and the at least one second mobile radio communication terminal device.

Paragraph 55 even teaches away from the feature of claim 15 of determining the position of the first mobile radio communication terminal device by inferring the distance between the first mobile radio communication terminal device and the at least one second mobile radio communication terminal device, since paragraph 55 cites that "this [locationing] information may be obtained either from cell phone (300) [which corresponds to the first mobile radio communication terminal device], a remote facility …", however, paragraph 55 does not describe determining the position of the cell phone (300) by inferring the distance between the cell phone (300) and the requested user`s location.

Additionally, in the above-mentioned Office Action, it is admitted that Mullen does not teach before emitting a retrieval signal emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof for said participation; and transmitting, from the first mobile radio communication terminal device, after

receipt of the acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal; and locationing on the basis of the signal propagation time of the at least one radio signal.

In this context, Johansson is cited which, according to the Office Action, is brought in conjunction with the feature of claim 15 of before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof for said participation. In this context, col.2, lines 22-27 and 66-67, col. 3, lines 1-6 and col. 6, lines 34-38 are cited.

Col. 2, lines 22-27 cites “the present invention addresses the problem of an outsider being able to establish the geographical location of a mobile station with the aid of a mobile locating service. Determination of the geographical location of a mobile constitutes a problem when it takes place against the wishes of the mobile user.”

Hence, col.2, lines 22-27 gives no hint for emitting a preceding inquiry signal from a first mobile radio communication terminal device for determination the location of a mobile radio communication terminal device. Quite the contrary, col. 2, lines 22-27 merely mentions a mobile locating service arranged to establish the geographical location of a mobile. However, there is no preceding inquiry signal from the first mobile radio communication terminal in Johansson.

Col. 2. Lines 66-67 and col. 3, lines 1-6 cites the service provider “asks to be told of the location of the mobile station. The mobile locating node asks the user for permission to determine the location of the mobile. The user gives his permission directly to the mobile locating node. Alternatively, the user gives his permission to the mobile locating node via the service provider.”

In contrast to claim 15, in col. 2, lines 66-67, it is not the first mobile radio communication terminal device, which emits the preceding inquiry signal, it is the mobile locating node, which asks the user for permission to determine the location of his mobile device.

To clarify these differences, we added to amended claim 15 the feature of a broadcast signal, which the first mobile radio communication terminal device emits as the preceding inquiry signal.

In contrast thereto, according to Johansson the user wants to determine the location of a

specific selected mobile device, which is generally not realized by emitting a broadcast signal, which is not directed to a specific selected mobile device.

In col. 6, lines 34-38, it is cited that "the procedure followed in accordance with fig. 5 is commenced with a step B1, similar to the procedure described in fig. 4, in which the second party A2 sends a message M1 requesting the geographical location of the mobile station MS."

Col. 6, moreover, does not describe the preceding inquiry signal either; quite the contrary "the second party A2 sends a message M1 requesting the geographical location of the mobile station MS".

In contrast to subject of claim 15, col. 6 clearly cites a directed request of a location of a specific mobile station MS. This is the opposite of a first mobile radio communication device emitting a preceding inquiry signal as broadcast signal for determining the readiness of mobile radio communication devices and after receiving an acknowledgement signal from a second mobile radio communication terminal device transmitting from the first mobile radio communication terminal device a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal.

In this context, it has to be mentioned that the node MPC in Johansson which tries to request the location of the MS, is not a first mobile radio communication terminal device, it is in generally not mobile at all, as it is illustrated in figure 1 in Johansson.

Further the MPC does not send a broadcast signal, rather it sends a signal to the MSC that serves the mobile station at that moment in time. Then the GMSC P asks the HLR for routing information for a mobile locating command. The HLR reads the register HLR indicator I and provides the requested routing information, provided that the indicator indicates that it is allowed to divulge the geographical location of the mobile (col. 5, lines 41-65).

It follows that in every case, Johansson does not describe the preceding inquiry signal comes from the first mobile radio communication, quite the contrary, the GMSC, which is not a mobile device, asks the HLR for routing information. Moreover, the request for location information in Johansson is directed to a specific mobile and is therefore not realized using a broadcast signal.

Therefore the cited passages of Johansson do not describe "before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an

acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio communication terminal device, wherein the preceding inquiry signal is a broadcast radio signal," as recited in claim 15.

Further, in the above-mentioned Office Action the feature of claim 15 of "transmitting, from the first mobile radio communication terminal device, after receipt of said acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal" is related, according to the Office Action, to col. 6, line 67 and col. 7, lines 1-8 and steps C3 through C6 in figure 5.

In this context the cited passages are summarized in the above-mentioned Office Action by "said mobile locating node transmits a signal to perform said locationing of said second mobile node after said reception of permission signal".

However, the mobile locating node is not allowed to be related with the first mobile radio communication terminal device according to claim 15, since according to claim 15 the local position of the first mobile radio communication terminal device is determined using the location of each second mobile radio communication terminal device, which is ready to participate in the locationing. In contrast thereto, in every case the location of the mobile locating node in Johansson is not determined at all. Hence there is no relation between the first mobile radio communication terminal device according to claim 15 and the mobile locating node of Johansson.

Further, Johansson does not describe at all the location of the mobile station MS for determination of the local position of the second party A2 asking to find the location of the mobile station MS (in figure 5). Hence there is no direct relationship between Johansson and the subject of claim 15.

Furthermore, Johansson does not give any hint for "emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that <u>each</u> second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof <u>to participate in determination of the local position of the first mobile radio communication terminal device</u>", since according to Johansson, merely the location of the second mobile station is determined and merely the location of one specific mobile station MS is requested in Johansson.

In the above-mentioned Office Action it is alleged that Johansson describes the preceding inquiry signal is a broadcast radio signal and this statement is brought into relation to col. 4, lines 25-27 of Johansson. Col. 4, lines 25-27 cites “Located in each cell CL1-CL3 is a respective radio base station BTS1-BTS3 that can maintain connection with the mobile stations MS, MS1-MS3 within the cell.”

This passage is summarized in the above-mentioned Office Action by “Said communication between said mobile locating node and said second mobile node that includes request signal is performed via radio frequency signals”.

As alleged above, the mobile locating node is not allowed to be brought into relation to the first mobile radio communication terminal device and further Johansson gives no hint for the request signal of the second mobile node is a broadcast signal. Indeed the signal of the mobile locating node, which is directed to the second node according to the above-mentioned Office Action is the opposite of a broadcast signal, which is generally not directed to a specific mobile station, but rather to a multiplicity of mobile stations, which are all able to receive the broadcast signal.

Hence, there is no hint in Johansson for a preceding inquiry signal, which is broadcast radio signal emitted from the first mobile radio communication terminal device, which can be received from a multiplicity of second mobile radio communication terminal devices.

Hence, it is clear that Johansson is not able to cure the deficiencies of Mullen.

According to amended claim 15, before emitting a retrieval signal, a preceding inquiry signal is emitted as a broadcast signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio communication terminal device and after that the first mobile radio communication terminal device transmits, after receipt of an acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal.

Thus, the effect can be attained that the retrieval signal is only sent to the second radio communication terminal device, from which the readiness to participate in the position determination has been indicated after receipt of the respective acknowledgement signal. This feature has the advantage that it is possible for the first mobile radio communication terminal

device, for example, to only take into consideration the most accurate information in its position determinations, if it receives a very large number of response signals from a large number of second mobile radio communication terminal devices.

Further, using a broadcast signal for the preceding inquiry signal enables to address a multiplicity of second mobile radio communication terminal devices, which increase the accuracy of determination of the location of the first mobile radio communication terminal device by their possibly high number.

Also Kurihara does not teach (which is also not stated in the above-mentioned Office Action) before the emitting of a retrieval signal, emitting a preceding inquiry signal as a broadcast signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio device and after that transmitting, from the first mobile radio communication terminal device, after receipt of an acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal.

Therefore, amended claim 15 is inventive in the light of cited references. Claim 15 is submitted to be allowable. Withdrawal of the rejection of claim 15 is earnestly solicited.

Claims 20 and 22-26 depend from claim 15 and add additional distinguishing elements. Claims 20 and 22-26 are thus also submitted to be allowable. Withdrawal of the rejection of claims 20 and 22-26 is earnestly solicited.

Claims 27 and 28:

The second clause of claim 27 recites:

> An inquiry unit using a broadcast radio signal as a preceding inquiry signal for requesting information of readiness to participate in the position determination and position information from at least one mobile radio communication terminal device located in a radio cell of a radio network of a radio communication system or in a different radio cell, wherein the radio cells are fixed by base stations, a position of the at least one mobile radio communication terminal device being known to either the at least one mobile radio communication terminal device or to the radio network.

Neither Mullen, Johansson, nor Kurihara teaches, discloses, or suggests "using a broadcast radio signal as a preceding inquiry signal for requesting information of readiness to

participate in the position determination and position information from at least one mobile radio communication terminal device located in a radio cell of a radio network of a radio communication system or in a different radio cell, wherein the radio cells are fixed by base stations, a position of the at least one mobile radio communication terminal device being known to either the at least one mobile radio communication terminal device or to the radio network," as discussed above with respect to the rejection of claim 15. Claim 27 is thus also submitted to be allowable, for at least those reasons discussed above with respect to the rejection of claim 15. Withdrawal of the rejection of claim 27 is earnestly solicited.

Claim 28 depends from claim 27 and adds further distinguishing elements. Claim 28 is thus also submitted to be allowable. Withdrawal of the rejection of claim 28 is earnestly solicited.

Claim 21:

Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Mullen, Johansson, and Kurihara in view of US Patent No. 7,151,939 to Sheynblat (hereinafter "Sheynblat"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

Claim 21 depends from claim 15 and adds further distinguishing elements. Neither Mullen, Johansson, nor Kurihara teaches, discloses, nor suggests “before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio communication terminal device, wherein the preceding inquiry signal is a broadcast radio signal,” as discussed above with respect to the rejection of claim 15. Sheynblat does not either, and thus cannot make up for the deficiencies of Mullen, Johansson, or Kurihara with respect to claim 21.

Concerning claim 21 it has to be mentioned that Sheynblat is not related to determining the locating accuracy of second mobile radio communication terminal devices. Instead, Sheynblat merely describes the terrestrial location devices are base stations coupled to an MPC, which is typically a fixed member of a network. Further, Sheynblat is directed to satellite positioning systems and its accuracy, which are not concerned by claim 21.

Sheynblat, rather, describes a method for providing indication of the quality of available location services. In this context, terrestrial methods, satellite positioning system methods and

hybrids of terrestrial and satellite based methods are mentioned.

However, Sheynblat does not mention the determination of accuracy of the location determination service of a first mobile radio communication terminal device, which uses neighbouring second mobile radio communication terminal devices for its own localisation.

As can be seen from figure 1 in Sheynblat, the terrestrial location devices are base stations coupled to an MPC, which is typically a fixed member of a network.

Since Sheynblat does not describe the additional feature of claim 15 of before the emitting of a retrieval signal, emitting a preceding inquiry signal as a broadcast signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof to participate in determination of the local position of the first mobile radio device and after that transmitting, from the first mobile radio communication terminal device, after receipt of an acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal, Sheynblat does not cure the deficiencies of Mullen, Johansson and Kurihara.

Claim 21 is thus submitted to be allowable. Withdrawal of the rejection of claim 21 is earnestly solicited.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all of claims 15 and 20-28 are allowable over the cited references. Allowance of all claims 15 and 20-28 and of this entire application is therefore respectfully requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is invited to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge them to our Deposit Account No. 19-3935.

Respectfully submitted,

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